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ABSTRACT

The Mobile Instructional Classroom (MIC) was combined with the concept of distance learning to provide coursework to inservice regular classroom teachers about handicapped students. A review of the literature revealed four factors necessary for assisting the teacher with integration of handicapped students: (1) knowledge about the characteristics of handicapped students, (2) knowledge about P.L. 94-142--the Education for All Handicapped Children Act, (3) knowledge of materials and strategies for teaching handicapped students, and (4) interactions or hands on experiences with handicapped students. The course followed a seven step outline: determine the purpose and objectives of the course and select appropriate course content, determine a test(s) for the course, review the prepared materials and modules in the MIC, develop or revise manuals to guide students in the use of modules in the MIC, develop a study guide to coordinate all aspects of the course, develop a course schedule or "A-Course-at-a-Glance" including dates and time lines, and develop an instructor's guide for the course. The use of computer assisted instruction and audiovisual resources as compiled in the mobile instructional classroom to increase flexibility of course delivery off campus was noted as positive and motivating by both students and instructors. (SB)

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# An Effective and Convenient Approach to the Inservice Preparation of Teachers of Mainstreamed Exceptional Children

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An Effective and Convenient Approach to the Inservice Preparation of Teachers of Mainstreamed Exceptional Children

## Introduction

A System for Personnel Development(ASPD) (1977), a federally funded project at The University of Iowa, provided the impetus for the development of an effective and convenient course delivery method.

The ASPD project was designed to provide inservice training to educators, administrators, and parents to assist them in developing competencies needed for the implementation of Public Law 94-142 (1975). The project includes two mobile instructional classrooms which are moved to off-campus sites for enriched instruction. The Mobile Instructional Classroom (MIC) concept was combined with the concept of distance learning to provide coursework to students in off-campus population centers.

The Mobile Instructional Classroom (MIC), a semi-trailer, when sited has the capacity to expand its side walls to provide a large classroom. The classroom includes 10 computer terminals for computer-assisted instruction, videotape monitors, film, filmstrip materials, booklets, and othe print materials. The MIC can be moved as needed to off-campus sites.

The Distance Learning concept includes organization of coursework for individualized instruction, study guides for students, faculty instruction on site, and an "800" telephone hookup to permit access to instructors on campus. Through the resources of the Center for Credit

Programs, the College of Education, and the ASPD project at The University of Iowa, the concepts of distance learning and a mobile classroom on site have been successfully combined to inservice regular classroom teachers about handicapped students.

This paper will describe the format for the development and delivery of a course using these concepts. Course evaluation by students endorsed the convenience and flexibility of the mobile classroom and the distance learning concept. Students also appreciated the individualized instruction and were motivated to learn.

In addition to the positive course evaluation by the students, the instructors were enthusiastic about the delivery model since their time was more flexible and less encumbered by a regular number of class meetings. After the course had been developed and scheduled, the instructors needed only to be at the off-campus site for five of the ten class sessions. This was a positive saving of time for the instructors and fostered greater motivation for self-directed learning. The time to develop and schedule the course was spent on campus. The course was developed from the following seven-step outline:

1. Determine the purpose and objectives of the course and select appropriate course content.
2. Determine a text(s) for the course.
3. Review the prepared materials and modules in the MIC.
4. Develop or revise manuals to guide students in the use of modules in the MIC.
5. Develop a study guide to coordinate all aspects of the course.
6. Develop a course schedule or "A-Course-at-a-Glance" including dates and time lines.
7. Develop an instructor's guide for the course.

These steps will be elaborated.

This paper describes the development and delivery of this inservice course for regular classroom teachers. If a substitute for the MIC is needed, course instructors can find off-campus sites with computer terminals and audiovisual media resources. At the present time, these resources are available in many public school systems.

## Course Development

### Purpose

The purpose and content for the course was generated from reviews of the literature (Friedel, 1980; Donaldson, 1980). The reviews showed four factors as necessary for assisting the regular classroom teacher with integration of handicapped students into regular classes. These factors were:

1. Knowledge about the characteristics of handicapped students.
2. Knowledge about Public Law 94-142.
3. Knowledge of materials and strategies useful for teaching handicapped students.
4. Interactions or hands on experiences with handicapped students.

These four factors became the purposes of the course and represented objectives to be accomplished by the course. Characteristics of exceptional children are presented through lecture, text reading, videotape, and a classroom observation project. Information on P.L. 94-142 is contained in a self-instructional, computer-assisted instructional module and the texts. The materials and strategies are available in the MIC. An assigned project required the resolution of a learning problem through use of materials and/or strategies. The "hands on" interaction is contained in a project requiring observation and interaction in a special education setting.

A review of the literature is one method for deciding on course content. Other methods may include conducting a needs assessment of potential students for the course; depending upon the instructor's experience with similar courses is another method as is following the format of a given text in the course area of study.

Texts

The decision regarding texts for the course was made by reviewing introductory texts and selecting the ones most appropriate to the course purpose and content. The texts, Educating Exceptional Children (Kirk & Gallagher, 1979), and Mainstreaming Handicapped Students: A Guide for the Classroom Teacher (Turnbull & Schultz, 1979) were selected to provide basic information about handicapped students as well as ideas and strategies for mainstreaming handicapped students.

MIC Materials

The third and fourth steps involved a search through a large number of materials available in the Mobile Instructional Classroom (MIC) to select appropriate materials for the course. These finally included five computer-assisted instructional modules. ASPD personnel assisted with the revision of manuals which coordinated the CAI mateirals with the course so that students could make the most effective use of the CAI modules. Other related modules, videotapes, and materials were categorized for each access for individual study by students who would enroll in the course.

Study Guide

The fifth step, to develop a study guide for the course, was completed with assistance from personnel in the Distance Learning and

Guided Correspondence Unit at The University of Iowa. A manual for developing this study guide was available and an editor assisted our efforts to generate the guide. The guide finally contained information illustrated by the following Table of Contents.

STUDY GUIDE

Table of Contents


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Course Schedule

The sixth step, to develop a course schedule, culminated with "A-Course-at-a-Glance." This was a schedule which noted class meeting dates, topics, and assignment due dates. The "Course-at-a-Glance" coordinated the time lines of off-campus faculty and students, with the Mobile Instructional Classroom schedule. The "Course-at-a-Glance" can reflect the course as a ten-week course and as a five-week course. The same material is covered in the same amount of time; however, in the shorter time frame teachers need to spend more hours per day to complete the course.

The ten-week schedule include 10 sessions. The first two sessions were with the course instructors. The instructors provided an orientation to the course and this new delivery system. Definitions and current trends in the exceptional child area were discussed.

The next four sessions were independent study sessions in the MIC. Local on-site professionals were employed to help students with the use of media and materials in the MIC. The MIC was open for the convenience of students. There were evening hours as well as hours on Saturdays and Sundays. Students were asked to read the material in the texts and in the manual developed for each module before using the computer terminal. By trial and error, students learned that these readings helped with the computer material. During the four sessions of independent study, an "800" telephone session was scheduled for student and instructor discussion. Students also called instructors at other times on the "800" line.

The seventh session with the course instructors was used to discuss the area of emotional disabilities and to interact with students regarding their questions about the individual study in the MIC. It was interesting to note the reactions of the students to the return of the instructors. Most of the students were feeling very independent and were enjoying their independent study sessions. Part of the seventh session was spent getting readjusted to a group classroom situation.

The eighth session was an independent study of P.L. 94-142 and the last two sessions were with the course instructors. These last two sessions were used to discuss the learning problems that students had resolved through use of the materials and strategies available in the MIC and to discuss future trends in the education of handicapped students.

Course Delivery

The development of the course and its supportive materials was a coordinated effort. The delivery of the course, another coordinated effort. The ASPD project arranged for the set up of the MIC at the off-campus site, the Division of Continuing Education at The University of Iowa advertised and arranged course registrations, the Program and Course Development Office arranged for the printing and delivery of course guides, etc. The instructors were scheduled to be at the assigned off-campus site on specified dates.

Instructor's Manual

After the course had been completed, the instructor's manual, was developed. The manual is available to give guidelines to other faculty who might be interested in teaching the course.

First Course Population Data

The course was delivered to an off-campus site about 80 miles from the University campus. Students traveled an average of 12 miles to the site. Distances traveled ranged from 2 blocks to 45 miles. Twenty-three students enrolled for the course. They were all teachers of elementary or secondary students.

Evaluation

The students were asked to complete a pretest and posttest based on total course content. The results showed average gain scores of 9 points which were significant beyond the .01 level.

Students spent an average of 1 hour 6 minutes per module with a range of 38 minutes to 2 hours 24 minutes. This range shows the flexibility possible within this instructional system.

Further evaluation by students in response to questionnaires about the modules was consistently in the satisfactory to excellent range. The modules in this range were rated by an average of 83% of the students. Only 3% of the students rated the modules as poor to unsatisfactory; the remaining students (14%) rated the modules as fair.

The students were asked to indicate the amount of knowledge they acquired by taking the course. An average of 93% of the students indicated that they received an average to above average amount of knowledge. The remaining 7% indicated below average gain or no gain of knowledge.

When asked for general comments about the course, students said:

-"I found working with the computer very interesting. This was a new experience for me."

-"I enjoyed working in the MIC. If a point was missed, the computer could be 'backed up.' It's hard to get a lecturer to 'back up.' I appreciate being able to go at my convenience."

-"For someone who is working full time, the MIC was terrific--you could choose your time to go."

-"The computer was fun. I was very apprehensive at first, but after the first module, there was no problem. The questions after you read a section of material were excellent, and a real help to learning. The CAI manuals were outstanding. I am sure I will refer to them again and again."

## Summary

The seven steps in the outline for development of the course to assist regular classroom teachers with integration of handicapped students have been described. This outline is suggested as a useful base for the development of inservice courses to assist regular classroom teachers with the integration of the exceptional children into the regular classroom. The use of computer-assisted instruction and audiovisual resources as compiled in the mobile instructional classroom in order to increase flexibility of course delivery off campus is noted as positive and motivating by both students and instructors. The combination of these features and the distance learning concept is suggested as a viable delivery system for off-campus inservice courses to regular classroom teachers and interested others.

References

A System of Personnel Development. A project funded by Division of Personnel Preparation, Bureau of Education for the Handicapped, Office of Education/DHEW, Project No. G007801842, The University of Iowa, Iowa City, IA, 1977.

Donaldson, J. Changing attitudes toward handicapped persons: A review and analysis of research. Exceptional Children, April 1980, 46(7).

Friedel, J. Change in knowledge and attitude of university students in secondary education after completion of a module in special education. Doctoral dissertation, The University of Iowa, Iowa City, IA, 1980.

Kirk, S., & Gallagher, J. Educating exceptional children (3rd ed.). Boston: Houghton Mifflin, 1979.

Turnbull, A., & Schultz, J. Mainstreaming handicapped students: A guide for the classroom teacher. Boston: Allyn & Bacon, 1979.

United States Government Printing Office. United States statutes at large containing public laws 91-696, 93-650, 93-651 and the laws and concurrent resolutions enacted during the first session of the ninety-fourth Congress of the United States of America 1975 and proclamations. Volume 89. Washington, D.C.: Author, 1977.